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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,927

11/25/2003

Michael Rehberger

P/4058-16

1165

7590 01/30/2007  
OSTROLENK, FABER, GERB & SOFFEN, LLP  
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EXAMINER

SAWHNEY, HARGOBIND S

ART UNIT

PAPER NUMBER

2885

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/722,927

Applicant(s)

REHBERGER ET AL.

Examiner

Hargobind S. Sawhney

Art Unit

2885

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No.: 6,623,152 B1 (Kroening).

Regarding claims 1-16, Kroening discloses an optical transmitter (Figure 3) comprising:

- an optical conduit 7 including an light output surface 8 (Figure 3, column 2, lines 66 and 67; column 3, lines 7 and 8); an optical coupler 1 including an input surface- positioned adjacent the input surface of the optical conduit 7- (not shown); the input surface capable of receiving light from a light source 3, the optical coupler including a optically transparent body capable of transmitting light from the light source 3 to the light conduit 7, and finally to the light output surface of the light conduit 7 (Figure 3, column 3, lines 1-8); a base 9 attachable to the circuit board 5 (Figure 3, column 3, lines 8-11); the light source 3 being a light emitting diode –LED-

(Figure 3, column 2, line 66); the base sleeve- integrally molded with the base 9, and partially surrounding the optical coupler 1 (Figure 3); the optical conduit 7 being a wave guide (Figure 3, column 3, lines 1-4); the optically transparent body of the optical coupler being integral with the light conduit (Figure 3, column 3, lines 1-4); the base 9 being embedded – being molded with - in the optical coupler 1 (Figure 3, column 3, lines 5-8 and 15-18); the base 9 including metallic substance – operationally required for electrical contact connection of the LED 3 with the circuit board 5 – needed for the SMD procedures (Figure 3, column 3, lines 8-11; and column 2, lines 35-37); the base 9 capable of withstanding reflow temperature of conventional solder (Figure 3, column 3, lines 8-11; and column 2, lines 35-37); the base including a portion – top surface –n receivable by a conventional “pick and place” apparatus (Figure 3); the optical transmitter – the complete assembly including elements 11-3, 7 and 8 - arranged on the circuit board 5 lateral to the LED 3, and the optical transmitter including an light input surface 2' positioned on the light coupling body 1, and over the LED3 (Figure 3); the base 9 being attached to the circuit board 5 (Figure 5, column 3, lines 8-11); the wave guide 1 including optical internally reflective contours 10 (Figure 3); and the LED 3 partially received in a recess 2 (Figure 3, column 3, lines 18 and 19).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No.: 6,623,152 B1 (Kroening).

Regarding method claims 17-24, Kroening discloses an optical transmitter (Figure 3) comprising all apparatus elements, except the following, as applied to claims 1-16 highlighted in section 2 above. Additionally, Kroening teaches the circuit board 5 including a first portion of adhesive 4 attaching the LED3 to the circuit board, and a second portion of adhesive attaching the light transmitter – portion 9 to the circuit board 5 (Figure 3, column 2, lines 66 and 67; column 3, lines 8-11, 15-17 and 18-21).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to meet the method limitations by applying the teachings of Kroening as detailed above, and together with the teaching as applied to claims 1-16 discussed in section 2 above..

***Relevant Prior Art***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Savage, Jr. (US Patent No.: 6779929 B1), Irie et al. (US Patent No.: 6354747 B1)

), Savage, Jr. (US Patent No.: 6264376 B1), Savage, Jr. (US Patent No.: 5548676), Oldham et al. (US Patent No.: 5481440), Savage, Jr. (US Patent No.: 5732176), Savage, Jr. (US Patent No.: 5440658), Katsuki et al. (US Patent No.: 5359208), Murphy et al. (US Patent No.: 5319527), Shigeno et al. (US Patent No.: 5247530), Boehme (US Patent No.: 4504830) and Mueller (US Patent No.: 3335387)

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S. Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 6:15 - 2:4530 PM.

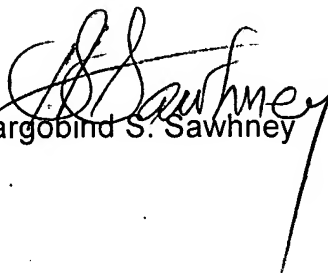
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jong-Suk (James) Lee can be reached on 571 272 7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HSS

1/25/07

Examiner:

  
Hargobind S. Sawhney